Gomphoceras, and the subgenus Trocholites, with internal siphuncle,

appears before Nautilus.

Prof. Blake continues some further general observations and carefully expressed views bearing on the origin and fixity of species and the theory of evolution, derived from the study of the Silurian forms, which afford a fair succession of the same class; and therefore, so long as the surrounding circumstances remain the same, the process of evolution by indefinite variation should either be uniform, or should cease when the best adaptation to these conditions had been acquired. He considers that the present study of Silurian Cephalopoda offers no contradiction or difficulty, but rather affords aid, if not as great as could be desired, yet as much as could be expected, to the general theory of evolution.

Hitherto the species of Silurian Cephalopoda were to be sought for in the different works of Murchison, McOy, Salter, and others; we have now, however, a monograph of the British forms, systematically arranged, carefully described, well illustrated, and replete with important observations on the structure, affinities, and modifications of the group, indicating throughout not only a great amount of labour, but of critical acumen and care displayed in the determination of the typical and varietal forms, thus supplying a muchwanted treatise on the early history of this group of Mollusca, and

adding a valuable contribution to palæontological literature.

Catalogue of the Fossil Foraminifera in the British Museum (Natural History). By Prof. T. RUPERT JONES, F.R.S., F.G.S., &c. 8vo. Pp. i-xxiv and pp. 1-100. London: Printed by order of the Trustees, 1882.

Following the work of Dr. H. Woodward on the British Fossil Crustacea, we have a similar Catalogue of the fossil Foraminifera in the British Museum, printed also by order of the Trustees.

This Catalogue having been prepared by Prof. T. R. Jones, one of our best authorities on this group of organisms, is a guarantee that it will form a useful work of reference to those interested in the Foraminifera, or assist them in consulting the specimens contained in the national collection. In the introduction a general sketch is given of the nature and mode of growth of the Foraminifera, including the differential character of the structure of their shells, upon which they are primarily divided into Imperforata or Porcellanea, and Perforata or Hyalina, and the former further subdivided into Calcarea and Arenacea, while some may have had limp, tough tests. consisting of material analogous to chitine, as Ceratestina. For so little is known of any real differentiation of the sarcode that there remain but few features of essential value for the classification of this infinitely variable order: "there are only the tissue, form, and structural peculiarities of the shell for determination; and these present many gradational phases, not only among individuals of any related group, but between the great groups themselves."